

Regional HIV/AIDS Epidemiologic Profile of Western Health Service Region (HSR), Massachusetts: 2013

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2013, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2012: Western HSR, Massachusetts²

	N	%
People Living with HIV/AIDS	2,032	56%
People Reported with HIV or AIDS who are Deceased	1,569	44%
Total Number of People Reported with HIV Infection or AIDS	3,601	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 2. Average annual rate of HIV infection diagnosis from 2009 to 2011 and HIV/AIDS prevalence rate on 12/31/12¹: Western HSR, Massachusetts²

Average annual HIV diagnosis rate from 2009–2011	Average rate per 100,000	Average annual number of HIV diagnoses
Western HSR, MA	8.2	68.3
Massachusetts Total	10.3	664.7
HIV/AIDS prevalence rate on 12/31/12	Rate per 100,000	Number of people living with HIV/AIDS
Western HSR, MA	244.3	2,032
Massachusetts Total	277.5	18,170

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2002–2011, Western HSR, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2002	1,582	49	104
2003	1,630	53	101
2004	1,698	54	122
2005	1,744	50	96
2006	1,792	42	90
2007	1,831	42	81
2008	1,865	42	76
2009	1,884	45	64
2010	1,923	33	72
2011	1,966	26	69

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 4. People diagnosed with HIV infection from 2009–2011¹ and people living with HIV/AIDS on December 31, 2012 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Western HSR, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	147	72%	1,291	64%
Female	58	28%	741	36%
Place of Birth:	N	%	N	%
US	151	74%	1,411	69%
Puerto Rico/US Dependency ³	35	17%	498	25%
Non-US	19	9%	123	6%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	75	37%	626	31%
Black (non-Hispanic)	39	19%	403	20%
Hispanic/Latino	86	42%	973	48%
Asian/Pacific Islander	5	2%	16	1%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	80	39%	535	26%
Injection Drug Use (IDU)	27	13%	567	28%
MSM/IDU	-- ⁷	-- ⁷	67	3%
Heterosexual Sex	25	12%	359	18%
Other	-- ⁷	-- ⁷	61	3%
Total Undetermined	69	34%	443	22%
• Presumed Heterosexual Sex ⁴	19	9%	176	9%
• Undetermined ⁵	50	24%	267	13%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2012	
Under 13	1	<1%	3	<1%
13 to 19	10	5%	13	1%
20 to 24	16	8%	55	3%
25 to 29	21	10%	64	3%
30 to 34	24	12%	103	5%
35 to 39	33	16%	146	7%
40 to 44	22	11%	244	12%
45 to 49	35	17%	396	19%
50 to 54	19	9%	441	22%
55 to 59	12	6%	265	13%
60+	12	6%	302	15%
Total⁶	205	100%	2,032	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 5. People living with HIV/AIDS on December 31, 2012 by gender and race/ethnicity: Western HSR, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	469	36%	157	21%
Black (non-Hispanic)	229	18%	174	23%
Hispanic/Latino	573	44%	400	54%
Asian/Pacific Islander	11	1%	5	1%
Total²	1,291	100%	741	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 6. People living with HIV/AIDS on December 31, 2012 by gender and exposure mode: Western HSR, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	535	41%	N/A	N/A
Injection drug use (IDU)	359	28%	208	28%
MSM/IDU	67	5%	N/A	N/A
Heterosexual sex	80	6%	279	38%
Other	33	3%	28	4%
Total Undetermined	217	17%	226	30%
• Presumed heterosexual sex ²	N/A	N/A	176	24%
• Undetermined ³	217	17%	50	7%
Total	1,291	100%	741	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Western HSR, Massachusetts¹, 2002–2011²

	Male		Female		Total
	N	%	N	%	
2002	69	66%	35	34%	104
2003	66	65%	35	35%	101
2004	77	63%	45	37%	122
2005	59	61%	37	39%	96
2006	56	62%	34	38%	90
2007	54	67%	27	33%	81
2008	55	72%	21	28%	76
2009	52	81%	12	19%	64
2010	51	71%	21	29%	72
2011	44	64%	25	36%	69

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Western HSR, Massachusetts¹, 2002–2011²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2002	33	32%	20	19%	50	48%	104
2003	31	31%	20	20%	46	46%	101
2004	27	22%	37	30%	57	47%	122
2005	26	27%	22	23%	44	46%	96
2006	28	31%	15	17%	45	50%	90
2007	27	33%	18	22%	35	43%	81
2008	26	34%	17	22%	30	39%	76
2009	24	38%	13	20%	25	39%	64
2010	31	43%	10	14%	31	43%	72
2011	20	29%	16	23%	30	43%	69

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Western HSR, Massachusetts¹, 2002–2011²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2002	70	67%	21	20%	13	13%	104
2003	76	75%	18	18%	7	7%	101
2004	74	61%	33	27%	15	12%	122
2005	61	64%	25	26%	10	10%	96
2006	59	66%	21	23%	10	11%	90
2007	55	68%	18	22%	8	10%	81
2008	55	72%	15	20%	6	8%	76
2009	50	78%	9	14%	5	8%	64
2010	54	75%	12	17%	6	8%	72
2011	47	68%	14	20%	8	12%	69

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Western HSR, Massachusetts¹, 2002–2011²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2002	25	24%	28	27%	-- ⁵	-- ⁵	22	21%	-- ⁵	-- ⁵	11	11%	13	13%	104
2003	27	27%	22	22%	-- ⁵	-- ⁵	18	18%	-- ⁵	-- ⁵	13	13%	15	15%	101
2004	23	19%	27	22%	-- ⁵	-- ⁵	23	19%	-- ⁵	-- ⁵	15	12%	27	22%	122
2005	26	27%	26	27%	-- ⁵	-- ⁵	15	16%	-- ⁵	-- ⁵	11	11%	17	18%	96
2006	29	32%	23	26%	-- ⁵	-- ⁵	10	11%	-- ⁵	-- ⁵	14	16%	13	14%	90
2007	24	30%	14	17%	-- ⁵	-- ⁵	11	14%	-- ⁵	-- ⁵	11	14%	19	23%	81
2008	30	39%	10	13%	-- ⁵	-- ⁵	10	13%	-- ⁵	-- ⁵	8	11%	17	22%	76
2009	30	47%	5	8%	-- ⁵	-- ⁵	5	8%	0	0%	-- ⁵	-- ⁵	20	31%	64
2010	28	39%	11	15%	-- ⁵	-- ⁵	10	14%	-- ⁵	-- ⁵	6	8%	15	21%	72
2011	22	32%	11	16%	-- ⁵	-- ⁵	10	14%	-- ⁵	-- ⁵	10	14%	15	22%	69

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Western HSR, Massachusetts¹, 2002–2011²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2002	30	104	29%
2003	30	101	30%
2004	40	122	33%
2005	38	96	40%
2006	23	90	26%
2007	31	81	38%
2008	21	76	28%
2009	18	64	28%
2010	25	72	35%
2011	20	69	29%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.
Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/13

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Western HSR, Massachusetts,¹ 2009–2011²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	46	147	31%
Female	17	58	29%
Race/Ethnicity:	N	N	%
White (non-Hispanic)	25	75	33%
Black (non-Hispanic)	15	39	38%
Hispanic/Latino	21	86	24%
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Other/Undetermined ³	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	48	151	32%
Puerto Rico/US Dependencies ⁴	9	35	26%
Non-US	6	19	32%
Total	63	205	31%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2009–2011 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/13